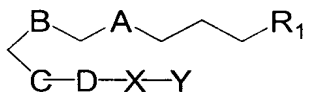
**WHAT IS CLAIMED IS:**

1. A composition for the treatment of dry eye and other disorders requiring the wetting of the eye comprising a pharmaceutically acceptable carrier and a pharmaceutically effective amount of one or more compounds of the following formula I:



I

wherein:

$R^1$ is $CO_2R$, $CONR^2R^3$, $CH_2OR^4$, $CH_2NR^5R^6$, $CH_2N_3$, $CH_2Hal$, $CH_2NO_2$, $CH_2SR^{20}$, $COSR^{21}$, or 2,3,4,5-tetrazol-1-yl, wherein:

R is H or $CO_2R$ forms a pharmaceutically acceptable salt or a pharmaceutically acceptable ester;

$NR^2R^3$ and $NR^5R^6$ are the same or different and comprise a free or functionally modified amino group, e.g., $R^2$, $R^3$, $R^5$ and $R^6$ are the same or different and are H, alkyl, cycloalkyl, aralkyl, aryl, OH, or alkoxy, with the proviso that at most only one of $R^2$and $R^3$ are OH or alkoxy and at most only one of $R^5$ and $R^6$ are OH or alkoxy;

$OR^4$ comprises a free or functionally modified hydroxy group, e.g., $R^4$ is H, acyl; alkyl, cycloalkyl, aralkyl, or aryl;

Hal is F, Cl, Br, or I;

$SR^{20}$ comprises a free or functionally modified thiol group; and

$R^{21}$ is H or $COSR^{21}$ forms a pharmaceutically acceptable salt or a pharmaceutically acceptable thioester;

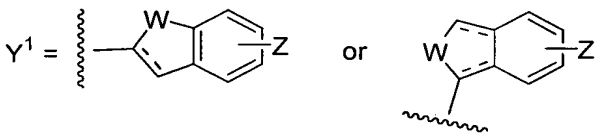
A, B and D are the same or different and are $C_1$-$C_5$ alkyl, $C_2$-$C_5$ alkenyl, $C_2$-$C_5$ alkynyl, or a $C_3$-$C_5$ allenyl group;

C is an oxirane or cyclopropane;

X is $(CH_2)_m$ or $(CH_2)_mO$, wherein m is 1-6; and

Y is a phenyl ring optionally substituted with alkyl, halo, trihalomethyl, acyl, or a free or functionally modified hydroxy, amino, or thiol group; or

X-Y is $(CH_2)_pY^1$; wherein p is 0-6; and




wherein:

W is $CH_2$, O, $S(O)_q$, $NR^8$, $CH_2CH_2$, CH=CH, $CH_2O$, $CH_2S(O)_q$, CH=N, or $CH_2NR^8$; wherein q is 0-2, and $R^8$ is H, alkyl, or acyl;

Z is H, alkyl, acyl, halo, trihalomethyl, or a free or functionally modified amino, thiol, or hydroxy group; and

---- is a single or double bond;

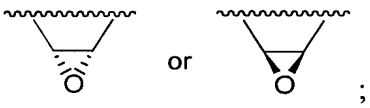
or X-Y is cyclohexyl or *n*-$C_5H_{11}$.

2. The composition of Claim 1, wherein for the compound of formula I:

$R^1$ is $CO_2R$, wherein R is H or $CO_2R$ forms a pharmaceutically acceptable salt or a pharmaceutically acceptable ester;

A and B are $C_{1-5}$ alkyl, alkenyl, or alkynyl or $C_{3-5}$ allenyl group;

C is



;

D is a $C_3$ alkyl, alkenyl, or alkynyl group;

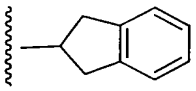
X is $(CH_2)_m$ or $(CH_2)_mO$, wherein m is 1 or 2; and

Y is a phenyl ring optionally substituted with halo, trihalomethyl, or a free or functionally modified hydroxy group; or

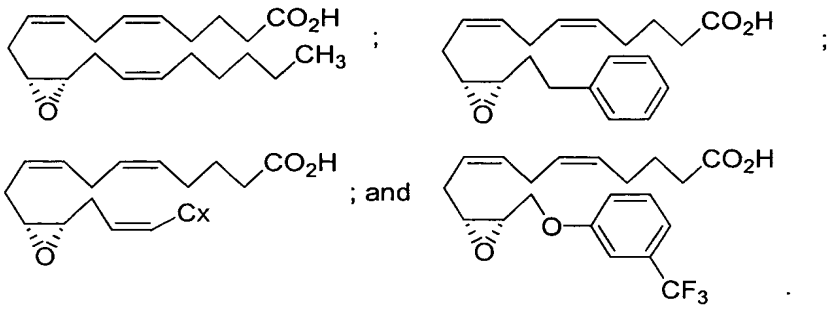
X-Y is *n*-$C_5H_{11}$ or cyclohexyl; or

X-Y is $Y^1$; wherein

$Y^1$ =

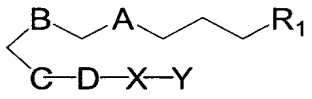


3. The composition of Claim 2, wherein the compound of formula **I** is selected from the group consisting of:




4. The composition of Claim 1, wherein the composition is a topical ophthalmic formulation.

5. A method for the treatment of dry eye and other disorders requiring the wetting of the eye which comprises administering to a mammal a composition comprising a pharmaceutically acceptable carrier and a pharmaceutically effective amount of one or more compounds of the following formula I:




I

wherein:

$R^1$ is $CO_2R$, $CONR^2R^3$, $CH_2OR^4$, $CH_2NR^5R^6$, $CH_2N_3$, $CH_2Hal$, $CH_2NO_2$, $CH_2SR^{20}$, $COSR^{21}$, or 2,3,4,5-tetrazol-1-yl, wherein:

R is H or $CO_2R$ forms a pharmaceutically acceptable salt or a pharmaceutically acceptable ester;

$NR^2R^3$ and $NR^5R^6$ are the same or different and comprise a free or functionally modified amino group, e.g., $R^2$, $R^3$, $R^5$ and $R^6$ are the same

or different and are H, alkyl, cycloalkyl, aralkyl, aryl, OH, or alkoxy, with the proviso that at most only one of $R^2$and $R^3$ are OH or alkoxy and at most only one of $R^5$ and $R^6$ are OH or alkoxy;

$OR^4$ comprises a free or functionally modified hydroxy group, e.g., $R^4$ is H, acyl; alkyl, cycloalkyl, aralkyl, or aryl;

Hal is F, Cl, Br, or I;

$SR^{20}$ comprises a free or functionally modified thiol group; and

$R^{21}$ is H or $COSR^{21}$ forms a pharmaceutically acceptable salt or a pharmaceutically acceptable thioester;

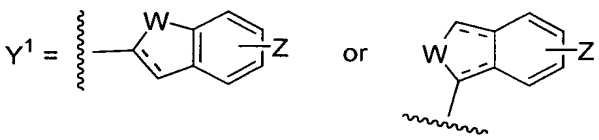
A, B and D are the same or different and are $C_1$-$C_5$ alkyl, $C_2$-$C_5$ alkenyl, $C_2$-$C_5$ alkynyl, or a $C_3$-$C_5$ allenyl group;

C an oxirane or cyclopropane;

X is $(CH_2)_m$ or $(CH_2)_mO$, wherein m is 1-6; and

Y is a phenyl ring optionally substituted with alkyl, halo, trihalomethyl, acyl, or a free or functionally modified hydroxy, amino, or thiol group; or

X-Y is $(CH_2)_pY^1$; wherein p is 0-6; and




wherein:

W is $CH_2$, O, $S(O)_q$, $NR^8$, $CH_2CH_2$, CH=CH, $CH_2O$, $CH_2S(O)_q$, CH=N, or $CH_2NR^8$; wherein q is 0-2, and $R^8$ is H, alkyl, or acyl;

Z is H, alkyl, acyl, halo, trihalomethyl, or a free or functionally modified amino, thiol, or hydroxy group; and

---- is a single or double bond;

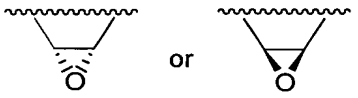
or X-Y is cyclohexyl or *n*-$C_5H_{11}$.

6. The method of Claim 5, wherein for the compound of formula I:

$R^1$ is $CO_2R$, wherein R is H or $CO_2R$ forms a pharmaceutically acceptable salt or a pharmaceutically acceptable ester;

A and B are $C_{1-5}$ alkyl, alkenyl, or alkynyl or $C_{3-5}$ allenyl group;

C is




;

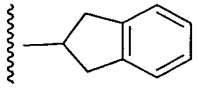
D is a $C_3$ alkyl, alkenyl, or alkynyl group;

X is $(CH_2)_m$ or $(CH_2)_mO$, wherein m is 1 or 2; and

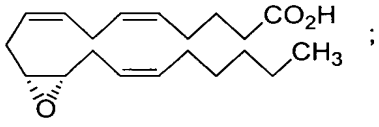
Y is a phenyl ring optionally substituted with halo, trihalomethyl, or a free or functionally modified hydroxy group; or

X-Y is *n*-$C_5H_{11}$ or cyclohexyl; or

X-Y is $Y^1$; wherein

$Y^1$ = 

7. The method of Claim 6, wherein the compound of formula I is selected from the group consisting of:



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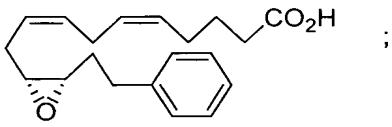

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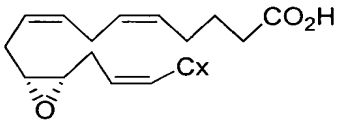
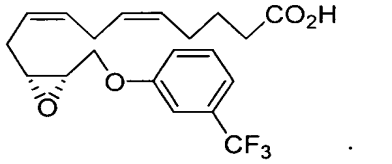
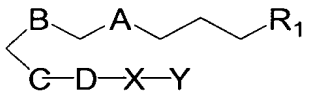


; and



8. The method of Claim 5, wherein the composition is a topical ophthalmic formulation.

9. The method of Claim 5 wherein the dry eye and other disorders requiring the wetting of the eye is symptoms of dry eye associated with refractive surgery.

10. A compound of the following formula I:



I

wherein:

$R^1$ is $CO_2R$, $CONR^2R^3$, $CH_2OR^4$, $CH_2NR^5R^6$, $CH_2N_3$, $CH_2Hal$, $CH_2NO_2$, $CH_2SR^{20}$, $COSR^{21}$, or 2,3,4,5-tetrazol-1-yl, wherein:

R is H or $CO_2R$ forms a pharmaceutically acceptable salt or a pharmaceutically acceptable ester;

$NR^2R^3$ and $NR^5R^6$ are the same or different and comprise a free or functionally modified amino group, e.g., $R^2$, $R^3$, $R^5$ and $R^6$ are the same or different and are H, alkyl, cycloalkyl, aralkyl, aryl, OH, or alkoxy, with the proviso that at most only one of $R^2$and $R^3$ are OH or alkoxy and at most only one of $R^5$ and $R^6$ are OH or alkoxy;

$OR^4$ comprises a free or functionally modified hydroxy group, e.g., $R^4$ is H, acyl; alkyl, cycloalkyl, aralkyl, or aryl;

Hal is F, Cl, Br, or I;

$SR^{20}$ comprises a free or functionally modified thiol group; and

$R^{21}$ is H or $COSR^{21}$ forms a pharmaceutically acceptable salt or a pharmaceutically acceptable thioester;

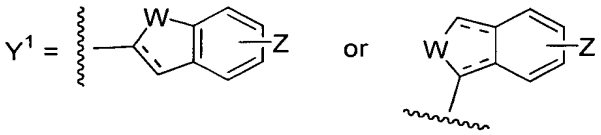
A, B and D are the same or different and are $C_1$-$C_5$ alkyl, $C_2$-$C_5$ alkenyl, $C_2$-$C_5$ alkynyl, or a $C_3$-$C_5$ allenyl group;

C is an oxirane or cyclopropane;

X is $(CH_2)_m$ or $(CH_2)_mO$, wherein m is 1-6; and

Y is a phenyl ring optionally substituted with alkyl, halo, trihalomethyl, acyl, or a free or functionally modified hydroxy, amino, or thiol group; or

X-Y is $(CH_2)_pY^1$; wherein p is 0-6; and



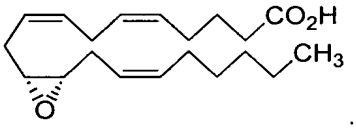

wherein:

W is $CH_2$, O, $S(O)_q$, $NR^8$, $CH_2CH_2$, CH=CH, $CH_2O$, $CH_2S(O)_q$, CH=N, or $CH_2NR^8$; wherein q is 0-2, and $R^8$ is H, alkyl, or acyl;

Z is H, alkyl, acyl, halo, trihalomethyl, or a free or functionally modified amino, thiol, or hydroxy group; and

---- is a single or double bond;

or X-Y is cyclohexyl or *n*-$C_5H_{11}$, provided that the following compound is excluded:

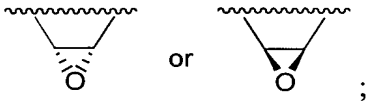


11. The compound of Claim 10, wherein for the compound of formula I:

$R^1$ is $CO_2R$, wherein R is H or $CO_2R$ forms a pharmaceutically acceptable salt or a pharmaceutically acceptable ester;

A and B are $C_{1-5}$ alkyl, alkenyl, or alkynyl or $C_{3-5}$ allenyl group;

C is



;

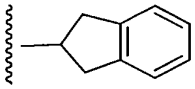
D is a $C_3$ alkyl, alkenyl, or alkynyl group;

X is $(CH_2)_m$ or $(CH_2)_mO$, wherein m is 1 or 2; and

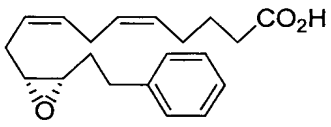
Y is a phenyl ring optionally substituted with halo, trihalomethyl, or a free or functionally modified hydroxy group; or

X-Y is *n*-$C_5H_{11}$ or cyclohexyl; or

X-Y is $Y^1$; wherein

$Y^1$ = 

12. The compound of Claim 11, wherein the compound of formula I is selected group consisting of:



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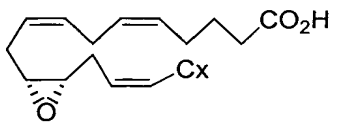

; and